

Room Surge Protector

SEF-440F

## GENERAL INFORMATION

The SEF-440F is a Class III surge protector device specially designed to protect against transient overvoltages in household electrical plants. The protecting influence area of this device includes a range of four meters around the point of the power supply line where the protector is connected. Should any surge take place, the protector would avoid other electrical equipment connected into that line to get harmed.

## PRODUCT DESCRIPTION

This equipment has been provided with 2 light indicators on the front panel. Their purpose is to monitor the status of the actual line and also to get a visual indication when the protector has expired.

**Green Light:** Power supply indication. Always lighted when there is power on the line.

**Red light:** Fault Indication. Normally not lighted. When a fault occurs, it will light up.

SEF-440F offers protection in differential mode (between lines) and common mode (between lines and the earth), giving a high level of protection for the installation.

## OPERATING PRINCIPLES

If an overvoltage peak takes place the surge protector SEF-440F discharges against the earthing system and protects the power supply line, preventing the devices plugged into the 5 meters range of the line to be harmed by the surge.

If the surge were much stronger than the protecting threshold of the device the protector might be destroyed after absorbing the energy of the overvoltage; This failure status is clearly indicated by a glowing red light, and then, the protector should be replaced..

## CONNECTION ADVICE

For connection instructions, see diagram 1. Terminals and connectors should be firmly fastened in order to resist working stresses during surge discharges. Earthing system is a must for good operation of the surge protector.

## MAINTENANCE

The status indicator of the surge protector must be periodically checked in order to detect the end of its Life Cycle, mainly due to discharges wearing. For optimal functionality of the whole protection device maintenance of the earthing system is required.

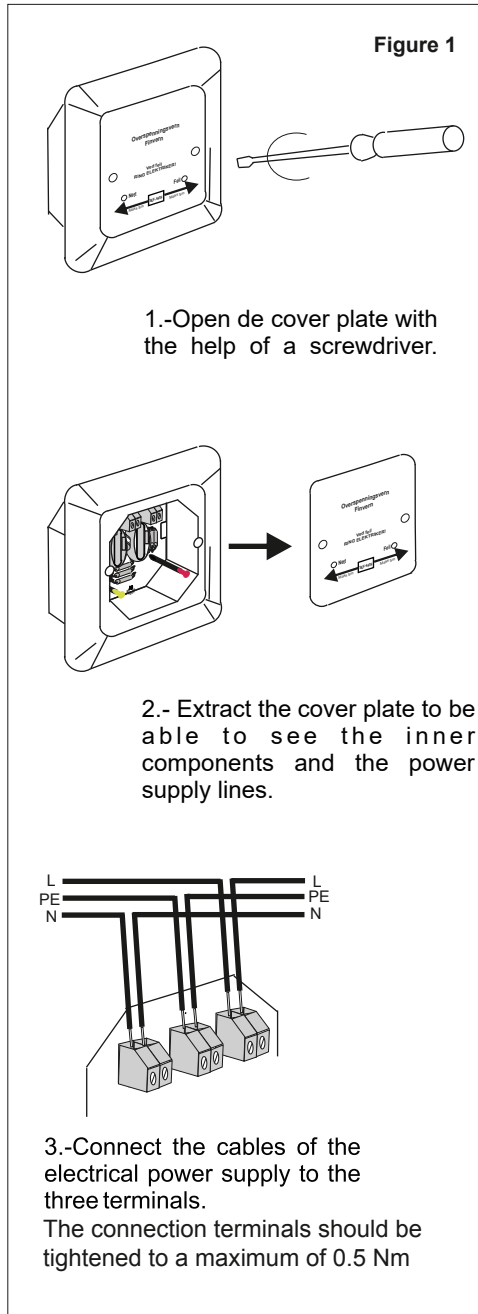


Table 1 **Electrical features** Class III

Product	SEF-440F
Number of protected lines	1
Nominal Voltage $U_N$	230 V. (50 Hz.)
Maximum service voltage $U_c$	550 V./470 V. (50 Hz.)
Nominal current $I_N$	16 A.
Protection level $U_p$ (1,2/50)	< 1,1 KV. L - N < 1,2 KV. L(N) - PE
Nominal Discharge Current $I_n$ (8/20 $\mu$ s)	< 2 KA. L - N < 2 KA. L(N) - PE
Max. Discharge Current $I_{max}$ (8/20 $\mu$ s)	< 6 KA. L - N < 6 KA. L(N) - PE
Combined discharge voltage $U_{oc}$ (1,2/50)	< 4 KV. L - N < 4 KV. L(N) - PE
Response time $t_A$	< 25 ns.
Protection topologies	Modes Differential & Common

Table 2 **Physical features**

Degree of protection provided by enclosure	IP20
Working Temperature	from -20 °C to + 40 °C
Storage Temperature	from -40 °C to + 70 °C
Size	84 x 84 mm.
Weight	gr.